

Climate risk becomes a matter of security

We are entering a phase of climate change where uncertain but catastrophic risks can no longer be ignored. Among the most serious and imminent is crossing the tipping point for destabilisation of the Atlantic Meridional Overturning Circulation (AMOC) — a major ocean current system that underpins climate stability, food security and energy systems across the North Atlantic and Northern Europe.

Amid global geopolitical upheaval, 2025 closed as one of the three warmest years on record. With fossil fuel emissions yet to peak and COP30 failing to deliver a course correction on global emissions, the world is now on a trajectory beyond 2.5°C of warming—deep within the danger zone for Earth-system tipping points.

These tipping points describe warming thresholds, beyond which critical planetary systems destabilise, locking in global and potentially catastrophic impacts in the future. The latest science suggests we may be approaching tipping points for the Amazon rainforest, the Greenland Ice Sheet, tropical coral reefs and, crucially, the AMOC.

We know from climate records dating back to the last Ice Age that the AMOC can tip from an ‘on’ state, as today, to an ‘off’ state in which circulation largely shuts down. There is broad scientific agreement—already expressed in the first IPCC reports—that warming will weaken the AMOC. While the precise threshold for tipping is uncertain, there is little doubt that the risk of passing the tipping point rises significantly with rising global temperatures, and that the risk is significantly larger than experts thought just a few years ago. Indeed, models now indicate a 70% chance of AMOC shutdown under a high-emissions future, and a 25% chance even under a low-emissions future. Multiple indicators suggest the AMOC is already weakening, with emerging signs of declining stability.

As is in aviation, nuclear energy and other critical systems, the central question is not whether every detail can be predicted, but whether a high-impact risk exists and how it can be reduced. From a governance perspective, the AMOC has become an unacceptably high risk, with potentially catastrophic impacts.

An AMOC collapse would cause long-lasting structural changes globally, with food systems being particularly vulnerable. Studies suggest the loss of up to [90% of current arable land in the UK](#), and major reductions in [climatically suitable areas for key crops globally](#). [Prolonged drought](#) across much of Europe would undermine agricultural productivity and render current food-production systems unviable. Shifted tropical rainfall belts would cause major drought and flooding in the tropics.

For the Nordic countries, AMOC destabilisation poses a unique risk due to the close coupling to the North Atlantic climate system. First-order impacts would include altered temperature and precipitation patterns and harsher winter storms, leading to significant second-order, socio-economic impacts. Agriculture would face declining and more volatile yields; hydropower energy systems would be stressed; fisheries and aquaculture would be disrupted by ecosystem changes and extreme weather conditions; and highly integrated supply chains would amplify food and energy shocks across Nordic economies.

Third-order socio-economic and security consequences include instability in climate-vulnerable regions, rising migration pressure towards Europe, strain on humanitarian and military capacities, and pressure on European political cohesion. AMOC destabilisation cannot be treated as a bounded or regional problem.

Governments across Europe are starting to take notice. AMOC has entered the agenda of the national security council in Iceland, senior officials in Ireland have identified it as the greatest climate risk facing

the country, defence-linked analyses in Finland and France consider its effects and we see major UK funding for tipping point research.

AMOC destabilisation is no longer a distant climate scenario but a national and planetary security risk. European defence analyses and emerging science converge on one conclusion: this is a form of systemic failure risk that governments must plan for now. We therefore call for three concrete actions:

- Strengthen Nordic climate leadership through joint action for rapid regional decarbonisation—both as risk reduction and global example—and a coordinated policy engagement strategy to influence slower-moving countries on the international stage. The only way to limit escalation of AMOC risk is to halt global temperature rise as quickly as possible.
- Establish integrated long-term observation, modelling, and preparedness systems—linked directly to civil defence and national security planning, in recognition that we have entered a phase of unacceptable risk of AMOC destabilisation or collapse. The Nordic–Arctic region must be treated as a critical hotspot for climate tipping points as the Arctic is warming two to three times faster than the global average and hosts at least six integrating tipping point systems.
- Place cascading systemic failure at the centre of climate risk assessment, going beyond sector-by-sector impacts to analyse first-, second- and third-order effects, including decision bottlenecks under stress.

Preparing for AMOC disruption is not alarmism. It is responsible governance in a new climate era.